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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,079	11/13/2003	Christiaan Johannes Snijders	2001-1302	7280

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YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

DINH, DUC Q

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,079

Applicant(s)SNIJDERS, CHRISTIAAN
JOHANNES**Examiner**

DUC Q. DINH

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is response to the preliminary amendment filed on May 28, 2004. Claims 1-8 are currently pending in the application. Claims 3-8 are amended.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Segalle (U.S Patent No. 6,532,002).

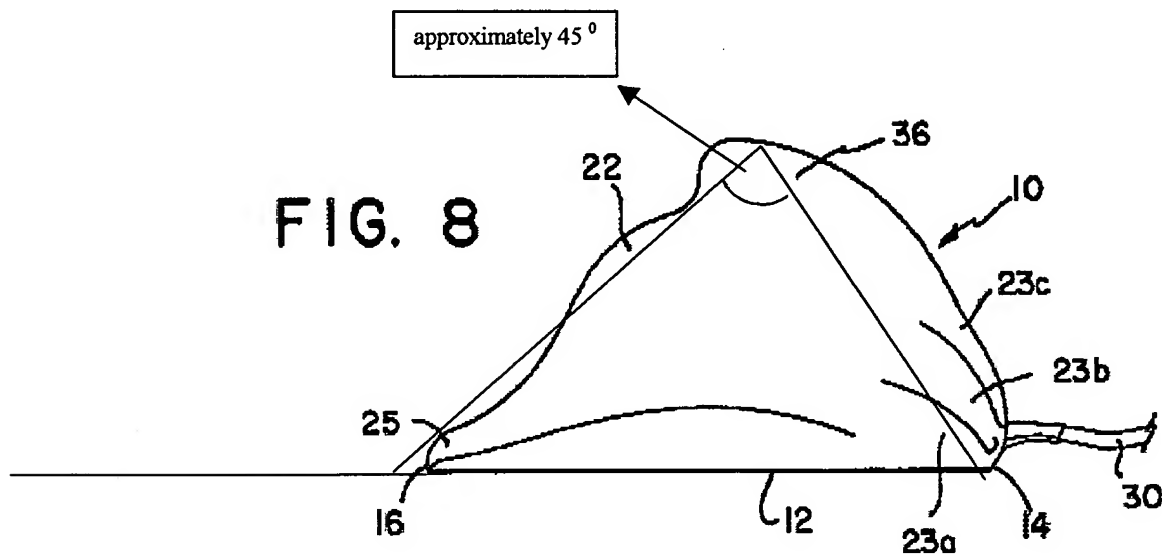
In reference to claim 1, Segalle discloses an operating device (computer mouse 10; Fig. 8; col. 5, lines 10-12) for a computer or the like, comprising a support for a human hand (the computer mouse 10 allow the hand to remain in the position of function during use col. 5, lines 10-12) provided with at least one button (23a) positioned such that it can be operated by the extremity of a finger, said device comprising:

a bearing surface (bottom surface 12) and a bulbous part (hemispherical surface 22), shaped in accordance with the shape of the human hand for supporting the mid section of the hand (metacarpus)/wrist (carpus) section of the operator (see Figs. 7 and Fig. 9 in which surface 22 having shape of a human hand to support the palm and the wrist of the operator), arranged thereon, said bulbous part comprising a surface for the palm of the hand (the hemispherical surface blends into an extension 25 for supporting the hollow of the hand, i.e. the palm of the hand), a central surface (the surface of the ridge 23 closed to the hollow of hand show at 36 in

Art Unit: 2629

Fig. 8; a plurality of contiguous raised ridges 23 with a surface defined 22 to depressions to accommodate the fingers; col. 5, lines 34-36) for supporting the proximal phalanges of the fingers and a distal surface for supporting the medial phalanges and distal phalanges (the surface of the ridges at the forward end 14 of the mouse for supporting user's fingers (fingers having medial phalanges and distal phalanges as shown in Fig. 7 and Fig. 9), wherein said distal surface is at an angle of approximately 75 degrees with said bearing surface (Fig. 7c shown the transverse axis lies obliquely, being more distal at the distal at the metacarpophalangeal joint of the index finger and more proximal at the metacarpophalangeal joint of the fifth finger. And angle of approximately 75 degrees is formed with the longitudinal axis, angle which is also present in the general shape of the invention; col. 4, lines 45-54).

In reference to claim 2, Segalle discloses the angle between the central surface (shown at 36 in Fig. 8) and the distal surface (forward end 14) is approximately 45 degrees with distal surface (Fig. 8 shows the central surface at 36 is at approximately 45 degrees with respect forward end 14).



Art Unit: 2629

In reference to claim 5, Segalle discloses there is a seat (26; Fig. 9) for the thumb made close to the end limit of said bulbous part (22; the thumb supporting surface 26 may be defined as a depression for holding the thumb downward movement toward the side edge 20, i.e.: at end limit of the hemispherical surface 22; col. 5, lines 37-43).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segalle (U.S Patent No. 6,532,002).

In reference to claim 3, Segalle does not disclose the surface for the palm of the hand is at an angle of approximately 15 degrees to said support. However, as seen in Fig. 7 the surface for the palm of the hand is at angle about 15-20 degrees to the surface 20 of the mouse (the surface under the palm as shown in Fig. 7 associated with the surface 22 of the mouse) and Fig. 19 shows the palm of the hand is at angle approximately about 15 degrees to the support surface 22.

It would have been obvious for one of ordinary skill in the art at the time of the invention to recognize angle between the surface of the palm of the hand and the support of the mouse can

Art Unit: 2629

be adjusted approximately 15 degrees as the operator's desire to comfort his/her hand while operating the mouse to provide maximum comfort for the muscle of the palm.

In reference claim 4, Segalle discloses the central surface (surface at 36 of Fig. 8 and Fig. 9) and surface for the palm of the hand (shown in Fig. 7) laterally are at an angle of approximately 10 degrees with respect to the bearing surface, rotated over the longitudinal axis in the direction of the little finger (see Fig. 9 and 11), supination, with, as a result, maximum relaxation of hand, lower arm, neck and shoulders (the wrist is in about 20 degrees of dorsiflexion and 10 degrees of ulnar flexion. The fingers are slightly flexed in each of their joints, the index being flexed least and the little finger being flexed the most; col. 4, lines 58-62). However, Segalle does not disclose the central surface for the palm of the hand is at angle of approximately 10 degree.

It would have been obvious for one of ordinary skill in the art at the time of the invention to recognize that with the angle of the wrist is about 20 degrees of dorsiflexion and 10 degree of ulnar flexion indicate the surface for the palm of the hand (shown in Fig. 7. col. 4, lines 58-62) laterally are at an angle of approximately 10 degrees with respect to the bearing surface 12.

In reference to claim 6, Segalle discloses the seat extends at an angle of approximately 45 degrees with respect to the adjacent part (the finger-supporting surface 22 and the thumb supporting surface 26 cooperate such that the hand being supported rests at an angle of forty-five degrees with respect to the support surface; col. 5, lines 45-47). Segalle does not disclose the seat extends at angle approximately 40 degrees with respect to the adjacent part.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modified the angle between the seat and the adjacent part to approximately 40 degrees to

Art Unit: 2629

provide more comfortable position of the hand while using the device as suggested by Segalle (col. 6, lines 49-43).

In reference to claim 7, Segalle discloses the forward end 14 (distal surface) is made with a cavity corresponding to the shape of the finger (see Fig. 9; a plurality of contiguous raised ridges 23 may be integrally formed with surface define 22 to depressions to accommodate the fingers; col. 5, lines 35-37). However, Segalle does not disclose the radius of curvature of the cavity is less than 60 mm.

It would have been obvious for one of ordinary skill in the art at the time of the invention to make the cavity corresponding the shape of the finger having the radius of the curvature of the cavity less than 60 mm because it would accommodate the user's finger and increase the convenience and comfort of use for most of regular operator. In addition, absent a showing of critically and/or unexpected result, it would be obvious to one of ordinary skill in the art to change the size of the radius of curvature of the cavity less than 60 mm as desired as was judicially In re Rose, 105 USPQ 237 (CCPA 1955) which recognizes that the change in size or range of well known elements is normally not desired toward patentable subject matter.

In reference to claim 8, Segalle discloses the mouse comprising two buttons (23a, 23b) that can be operated by two adjacent fingers. However, Segalle does not discloses the centre-to-centre distance (a) of said buttons being 16-17 mm.

It would have been obvious for one of ordinary skill in the art at the time of the invention to recognize the mouse of Segalle with buttons 23 would conform the regular size of user's fingers, i.e.: index finger and middle finger, having the central distance about 16-17 mm. Therefore, it would have been obvious to make the central to central distance of buttons 23a and

Art Unit: 2629

23b of Segalle about 16-17 mm that fit a fingers size of a regular operator for providing because it would accommodate the user's finger and increase the convenience and comfort of use for most of regular users. In addition, it would been obvious to one of ordinary skill in the art to change the range of the central to central button to about 16-17 mm as desired as was judicially In re Rose, 105 USPQ 237 (CCPA 1955) which recognizes that the change in size or range of well known elements is normally not desired toward patentable subject matter.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S Patent No. 6,590,564 of McLoone et al. discloses an ergonomic computer mouse.

U.S Patent No. 6,954,811 of Edwards et al. discloses an ergonomic computer mouse.

U.S Patent No. 6,072,471 of Lo discloses a upright computer mouse.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC Q DINH
Examiner
Art Unit 2629

A handwritten signature in black ink, appearing to read 'Duc Q Dinh', written in a cursive style.

DQD
April 16, 2006